

Name: _____

at1110paper__practice__test (v109)

1. Solve the equation with factoring by grouping.

$$18x^2 + 24x - 15x - 20 = 0$$

$$(6x - 5)(3x + 4) = 0$$

$$x = \frac{5}{6} \quad x = \frac{-4}{3}$$

2. Solve the equation.

$$(4x + 9)(6x - 7) = 0$$

$$x = \frac{-9}{4} \quad x = \frac{7}{6}$$

3. Factor the expression.

$$x^2 + 12x + 35$$

$$(x + 5)(x + 7)$$

4. Expand the following expression into standard form.

$$(7x - 9)(7x + 9)$$

$$49x^2 + 63x - 63x - 81$$

$$49x^2 - 81$$

5. Solve the equation.

$$10x^2 - 21x - 7 = 5x^2 - 2x - 3$$

$$5x^2 - 19x - 4 = 0$$

$$(5x + 1)(x - 4) = 0$$

$$x = \frac{-1}{5} \quad x = 4$$

6. Factor the expression.

$$9x^2 - 64$$

$$(3x - 8)(3x + 8)$$

7. Expand the following expression into standard form.

$$(6x + 7)(3x - 2)$$

$$18x^2 - 12x + 21x - 14$$

$$18x^2 + 9x - 14$$

8. Expand the following expression into standard form.

$$(8x - 7)^2$$

$$64x^2 - 56x - 56x + 49$$

$$64x^2 - 112x + 49$$